University of Alberta

Correlates of Successful Retirement and Aging

by

Sabrina Lea Fox ©

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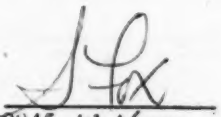

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The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies and Research for acceptance, a thesis entitled Correlates of Successful Retirement and Aging submitted by Sabrina Lea Fox in partial fulfillment of the requirements for the degree of Masters of Education.

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Dedication

I dedicate this work to my father and mother and husband, all of whom have provided me with great love, support, and understanding. Carpe diem.

ABSTRACT

Five variables were defined and examined to see if and or how they affect life satisfaction level, in retirement. The five variables were: interests/avocations, financial status, provision of social relations, locus of control style, and illness behaviors. Retired or semi-retired persons in central Alberta were invited to complete 6 instrument scales for the variables listed above. Twenty-six subjects submitted completed forms. Analysis of the data revealed a positive correlation between life satisfaction and financial status, and between life satisfaction and locus of control. A negative correlation was found to exist between illness behaviors and life satisfaction. A negative correlation was found to exist for females between provision of social relations and the life satisfaction scale; this means that inadequate social relations negatively affect the life satisfaction score. No such relationship was found to exist between social relations and life satisfaction for males. No relationships were found between life satisfaction levels and interest/activity levels for either gender. Further, a moderately strong correlation was discovered between provision of social relations and illness behaviors. Overall then, of the 5 identified variables, 4 yielded statistically significant correlations with life satisfaction. In addition, locus of control correlated to provision of social relations and the financial index. A negative correlation was found to exist between provision of social relations and illness; this means that as social relations are lessened or inadequate, more illness behavior is exhibited. Together, the financial and provision of social relations measures correlate r=.76 with the measure of life satisfaction. It seems that certain factors can influence one's level of satisfaction upon retirement. Consequently, it may then be useful to isolate and examine those factors which influence one's chances of attaining a successful retirement and educate people to plan appropriately to maximize their chances of being satisfied upon retirement.

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CHAPTER I

Introduction

Satisfaction and well-being in old age are highly variable phenomena among individuals. It is likely that certain variables contribute to well-being; therefore, it is desirable to isolate and examine these variables. Life expectancies are increasing, and more individuals are retiring at or before 65 years. As a result, retirement may span a far longer time period than it has ever done before. The average life expectancy for Canadian males is 74.9 years, and for Canadian females, 81.2 (Statistics Canada,1995). This means that many persons may experience twenty or more years of retirement. Given longer periods of retirement, therefore, it is important that plans are made earlier in life to facilitate success in retirement and adjustment to aging.

A literature review examining retirement and aging literature for variables which contribute to satisfaction and adjustment in old age has indicated that five variables may correlate with success upon retirement. The variables that were most recurrent in the literature were: interests/avocations, financial status, provision of social relations, locus of control style, and illness behaviors (Brecher,1984; Costa, Metter & McCrae, 1994; Gordon,1984; Hayflick,1994; Howard, 1978; Hunnisett, 1981; Johnson,1986; Knopf,1975; Novak,1985; Riker & Myers,1990). The relationships of these five variables to satisfaction in retirement was the main focus of the present study.

Like most significant life transitions and phases, successful retirement is facilitated by proper knowledge, planning, and foresight. Certain attitudes, behaviors and activities performed or omitted earlier in development may have either a positive or a negative effect upon the ability to have a successful retirement and to make a positive adjustment to the changes that natural aging brings. By examining the attitudes and behaviors of "successful" and "less successful" retirees, it may be possible to gather information that will provide knowledge about retirement for young and old people in

general as well as those involved in health and welfare. Awareness of attitudes and behaviors should help in making the best choices and selecting the best lifestyle patterns to achieve a successful retirement and old age.

For the purpose of the present study "successful aging. . . [has been] equated [to] the maintenance of psychological adjustment and well-being across the full lifespan" (Costa, Metter & McCrae,1994;53). Retirement is seen as a natural stage in lifelong development and as such, one that is affected by earlier behaviors and attitudes. After turning 100, the famous composer Eubie Blake stated: "If I had known that I was going to live this long, I would have taken better care of myself" (Hayflick,1994;43).

The purpose of this study was to determine if certain identified variables affected level of satisfaction and well-being during retirement and old age. As noted, the selected variables thought to affect level of satisfaction and well-being during retirement and old age are: interests/avocations, financial status, provision of social relations, locus of control style, and illness behaviors. These five variables have been statistically examined in relation to each other and to self-reported levels of satisfaction as tested via the Life Satisfaction Index (Concoran & Fischer,1987). Further, these variables have been subjected to both linear and multiple regression analyses and compared for joint effects and cross-correlations to determine if certain variables must coexist in order for them to affect the level of satisfaction during retirement.

Rationale & Purpose

There were five key purposes for this study on aging. One purpose was to explain and differentiate between natural aging and pathological aging. Another purpose was to discuss common beliefs associated with aging. If valid data are collected and reported, they may serve to dispel many of the popular misconceptions and perhaps help diffuse some of the fears which accompany thoughts of retirement and aging. Thirdly, this study is intended to help inform younger persons about retirement and

aging so that they will be more effective in their planning for retirement. Knowledge about the process of retirement and aging may enable a person to discuss and plan for retirement and aging openly because often eventual retirement is ignored or left unconsidered. As a result, many people are ill-prepared to cope with retirement (Prentis,1992). Fourth, the main underlying purpose was to examine how five variables correlated with life satisfaction. After conducting an extensive literature review and interviewing people over 55 at various stages of the retirement process, certain factors impacting retirement were recurrent. These were interests/avocations, financial status, provision of social relations, locus of control style, and illness behaviors. By measuring and correlating these factors with a measure of satisfaction, it is hoped that the present study will reveal how certain factors affect satisfaction levels reported during retirement. Lastly, it is hoped that the findings of this study will enable readers, both professionals and others, to better understand the transition and process of retirement and normal aging. These persons, as a result, should be better able to make intelligent choices and decisions that will improve the quality of life for aging persons.

Definition Of Terms

Ageism: "is the notion that people cease to be people, cease to be the same people, or become people of a distinct and inferior kind, by virtue of having lived a specified number of years" (Comfort,1977:29).

Aging: refers to the " . . . physical, psychological, and social processes of growing older that begin at conception and continue until death" (Sherron & Lumsden,1978:7).

Geriatrics: is the scientific study of diseases of the elderly (Hayflick,1994:2).

Gerontology: means the scientific study of the aging process (Hayflick,1994:2).

Health: refers to ". . . the ability to function well enough to carry out normal roles and responsibilities in the community. This definition has several advantages. It is relatively easy to determine how well people are functioning; it directs attention to conditions within the individual or environment which, when corrected, will improve functioning; and, it makes sense to the aged, if not to the professionals."(Anthony Lenzer, in Knopf, 1975:14).

Illness behaviors: refers to those behaviors and pursuits which are either an indication of real health problems and or enable an older person to get attention from caregivers and relations (Concoran & Fisher,1987).

Life Expectancy/Longevity: "the period of time that an animal can be expected to live, given the best of circumstances" (Hayflick,1994:15).

Locus of control: refers to an individual's center of control. "An individual with an external locus of control believes that reinforcement is based on luck or chance, while an individual with an internal locus of control believes that reinforcement is based on his or her own behavior" (Concoran & Fischer,1987:198).

Middle age: refers to all persons between 50 and 64 years of age.

Natural or Normal aging: ". . . involves changes -- biological, sociological, or psychological -- that are inevitable and occur as the natural result of maturation . . . ". (Hayslip & Panek,1993: 4)

Old age/Later maturity: refers to all people who are of full retirement age, 65 years of age or better.

Pathological aging; refers to processes that result from disease (Hayslip & Panek, 1993:4). Disease is not viewed as a natural process of aging.

Retirement: refers to the state of having left one's major career or vocation on either a part-time or full-time basis. Early retirement may begin at 55 years of age while mandatory retirement has typically been set at 65. (Riker & Myers, 1990).

Successful aging: "successful aging [has been] equated [to] the maintenance of psychological adjustment and well-being across the full lifespan" (Costa, Metter & McCrae, 1994:53).

Well-being: " a state characterized by health, happiness, and prosperity" (Random House,1984).

CHAPTER II

REVIEW OF RELATED LITERATURE

Introduction

The potential to live longer and healthier lives is being realized as more people are surviving into their eighties and beyond. In spite of the fact that we all age, there is a tendency for individuals to deny aging. In addition, primary or natural aging is often viewed as synonymous with pathological aging (Nadelson,1990; Spar & La Rue,1990; Sulamith,1972). Natural aging is the result of the biological processes of aging. Natural aging may be defined as changes which occur in the organism which are genetically programmed or built into the normal cells which over time lower the probability of survival and reduce the organism's physiological capacity for self-regulation, repair and adaptation to environmental demands (Spar & La Rue,1990). There are normative aspects to the physical changes associated with natural aging. Visual and aural decline may begin in the 20s. There is progressive loss in the musculoskeletal system after they peak at about 25 to 30 (Riker & Myers, 1990). Over time there are changes such as heart size and efficiency declines, increased cartilage calcification, and increased joint rigidity (Hayflick,1994; Spar & La Rue,1990). These physical changes occur slowly as we age whereas pathological changes often are more fast-paced. Pathological aging refers to changes that result from pathology or disease (Hayflick,1994; Riker & Myers,1990). For example, diseases such as heart disease, diabetes, Alzheimer's disease, cancer and stroke are examples of pathology which can dramatically accelerate the aging process (Spar & La Rue,1990). Fear of aging is increased by viewing aging and disease as synonymous. While all persons age, only some will be affected by pathology. It is possible to have a healthy and vital old age (Erikson, Erikson, & Kivnick,1986; Hayflick,1994; Liptzin,1994). As McKenzie (1980) states,

> Ageism reflects a deep-seated uneasiness on the part of the young and middle-aged - - a personal revulsion to and distaste for growing old, disease, disability; and fear of powerlessness, 'uselessness', and death (p.19).

Ageism is a problem in North American society. The literature on aging and retirement indicates that younger persons have many misconceptions about the process of aging and about old age itself. Fears of memory failure, physical decline and of purposelessness are prevalent (Costa, Metter & McCrae,1994; Riker & Myers,1990). Many younger persons believe that at 65 all of a sudden health and vitality decline dramatically (Prentis,1992). In fact, the decline has been ongoing throughout the lifespan. Most persons aged 65 and older are still in good physical health, have competent mental faculties, and can compete in the work world with younger colleagues (Hayflick,1994; Prentis, 1992). Fear and ignorance about aging colour perceptions about aging and cause some people to make choices and decisions that will put their health and potential for a successful retirement in jeopardy. There are certain behaviors that appear to maximize the potential for having a healthy and productive retirement and old age. Following certain exercise routines, eating a balanced diet, avoiding smoking and similar choices made earlier in the lifespan impact the aging process (Hayflick,1994; Milletti,1987; Riker & Myers,1990). Persons who fear aging and ignore the role they may play in improving or diminishing their health may do so to their detriment. Consequently, part of the rationale for this study was to define aging in a realistic manner which differentiates between natural and pathological aging so that the two are not seen as synonymous. As a result, persons may become more aware of the active role they may play in retaining and maximizing their health potential throughout life. Changing demographics which result in an aging society require that

the public and health care experts be better informed about the process of aging in order to help individuals prepare and cope with retirement and the aging process.

LITERATURE REVIEW

Several purposes are served by conducting a review of the relevant literature. The first purpose is to explore definitions of aging which are typically used and differentiate between natural and pathological aging. The second purpose is to investigate psychological theories of aging to provide a framework for understanding the issues and changes typically encountered by those in middle and later maturity/old age and to build upon knowledge which has already been established in this area. The third purpose is to identify common beliefs associated with aging and distinguish between certain misconceptions and facts. The fourth purpose is to ascertain how this research fits into the larger field of gerontological research. The fifth purpose is to isolate those variables which appear to significantly affect the transition to retirement and old age. In turn, these variables will be studied to determine the strength and direction of the impact they may have on the process of adjusting to retirement and old age.

Defining Aging

"Aging is the only fatal affliction that all of us share" (Hayflick,1994:12). As such, it is a process that is not wisely ignored. There are several different ways of defining and viewing aging. Chronological aging refers to the number of years a person has lived since birth whereas biological aging refers more specifically to the physiological changes that a person undergoes as a result of age. After chronological aging, the terms biological and psychological aging are the most commonly used (Hayflick,1994; Hayslip & Panek,1993; McKenzie:1980). Aging is not just the passage of time. Biological aging refers to an individual's relative organ and body system change as well as to an individual's present position relative to the life expectancy for his/her species (Hayflick,1994). Individual organisms have cells and organs which age at differing rates. As a result, it is very difficult, if not impossible, to

measure biological age (Spar & La Rue,1990). Typically, chronological aging and biological aging are discussed in unison whereas psychological aging refers to "the adaptive capacities of an individual, such as one's coping ability, problem-solving skill, or intelligence" (Hayslip & Panek,1993,p.7). Another way of viewing aging is simply to ask individuals how they feel; this is termed 'personal aging' (Hayslip & Panek,1993,p.9). Clearly, age is not an easy construct to define.

One way of viewing aging is to see it as synonymous with development. We develop throughout the lifespan albeit at differing rates. Every stage or point along the lifespan has pluses and minuses (Erikson, Erikson, & Kivnick,1986). For example, in youth one may have great physical strength and the freedom to pursue time-consuming activities such as sports. However, in youth the individual has inexperience and uncertainty about his/her potential. In contrast, during middle age a person may have multiple demands on his/her time and have little time for avocational pursuits; however, middle age may be a time for satisfactory fulfillment of career goals. Old age may be accompanied by physical slowing down, but it may also have the positive potential for more tempered acceptance of the vicissitudes of life. For this study, "successful aging [has been] equated [to] the maintenance of psychological adjustment and well-being across the full lifespan" (Costa, Metter & McCrae,1994:53).

Normal And Pathological Aging

Normal and pathological aging, though interrelated in their effects, may be seen as distinct processes. According to Hayslip and Panek (1993) normal aging ". . . involves changes -- biological, sociological or psychological -- that are inevitable and occur as a natural result of maturation. . . ". In contrast, pathological aging refers to processes that result from disease (p.4). Disease is not a natural process of aging; disease affects some persons but not all. Grey hair and the rigidification of bones is a natural part of the aging process. On the other hand, cancer and cataracts are examples

of pathological aging (Hayslip & Panek,1994). The normal aging process does interact with pathological aging as increased aging leaves an individual more vulnerable to the ravages of disease (Hayflick,1994). While normal aging occurs in virtually all aging persons, diseases or pathological changes only occur in some specific individuals. For this study, biological aging itself may be viewed as:

> the process of change in the organism, which over time lowers the probability of survival and reduces the physiological capacity for self-regulation, repair and adaptation to environmental demands (Birren & Zarit: 1985:19).

Natural aging is genetically programmed into the organism whereas pathological aging is due to the accumulated effects of environmental insult, disease and trauma (Birren & Zarit,1985). Some aspects of retaining health and freedom from disease may be controlled by the individual whereas others cannot. Getting proper nutrition and plenty of exercise may help an individual retain optimal health throughout the aging process. Smoking, drinking to excess, and so forth may be contrary to retaining health.

In her enduring work, Old Age (1977) Simone de Beauvoir identifies factors involved in body and mind decline". . . health, heredity, environment, former habits, and the standard of living" (p.37). Some of these factors may be altered to improve quality of life for retirement and old age. Although it may appear as such, one does not turn old suddenly. Aging, rather, is a gradual process during which an individual's body and organs degenerate or 'wear out' gradually (Spar & La Rue,1990). There are particular steps a person may take to optimize his/her health and well-being; there are other behaviors a person may engage in which will compromise his/her health and well-being (Heynen & Boyer,1990). Yet, heredity plays a role despite such behaviors. As a result, in the present study, five different variables are examined because they each affect the aging process. Aging is complex and multifaceted. Health behavior, financial status, locus of control style, provision of social relations, and career and

avocation choice may all impact the process of aging. Indeed, the interaction of these variables may also combine to affect life satisfaction.

There are also psychological repercussions to aging. As we grow and develop we accumulate experience and skill which tend to increase our pride and self-esteem (Knopf,1975:32). However, the pace of skill development begins to slow as one passes middle age (50-60 years). At middle age most persons deny the slowing down, but denial does not halt the process. Instead, the pace continues to slow as one gets older. As one loses tempo there is usually a loss of self-esteem. Depression often occurs then (Knopf,1975; Krause,1991). The sense of loss experienced due to a general slowing down of tempo may be decreased by helping aged persons find new ways of defining themselves (Aldwin,1991; Blythe,1980; Nadelson,1990). For example, to maintain self-worth a person may need to redirect energy previously directed at business activities towards volunteer work. Everyone needs to believe that he/she is vital and purposeful at all ages, a thread common in many theories concerned with aging (Heckhausen & Baltes,1991; Nadelson,1990). Humanists such as Rogers and especially Maslow, also acknowledge the great importance of self-esteem (Maslow,1976; Rogers, 1951). There are some liberties to aging, some freedoms that may be viewed as pluses which can come with aging: less obligations, more free time, the ability to pursue one's interest areas (Kennedy,1991). Jung (1965) has even suggested that the greatest potential for self-fulfillment occurs after 40. The author of the present study examined people over 55 and their reported levels of self-fulfillment as measured with the life satisfaction index.

PSYCHOLOGICAL THEORIES ON AGING

Three theories of development are discussed in the present study. These relate to the later years of life and are congruent with the measures selected for the present study. Psychological aging theories were examined in order to help the researcher find an appropriate framework for analyzing key retirement variables and to aid in the understanding of the issues and changes typically encountered by those in middle and later maturity/old age. One is the disengagement theory which suggests a typical pattern of withdrawal from activity as one ages (Lazarus & Delongis,1983). Disengagement may be defined as a reciprocal process where the aging individual withdraws from social roles while society withdraws from him/her as a worker. The disengaging individual may then spend more time pursuing personal interests. Two stage theories concerned with aging are also examined: Levinson (1978 & 1996) and Erikson's (1986) theories. In much of the literature on aging, Levinson and Erikson are examined. Levinson studied middle aged and retiring men and women and found that these individuals faced the resolution of conflicting issues (Riker & Myers,1990). Levinson's findings are congruent with Erikson's psychosocial theory of development.

Erikson postulates that at each life stage there is a crisis, the resolution of which (either positive or negative) serves as a catalyst to development. Erikson's theory fits best with the present study of retirement and old age as it more clearly depicts the role that individual personality and personal choice have upon the ability to successfully accept and adapt to the realities of the aging process. After reading extensively on aging and also discussing retirement with semi-retired and retired persons, Erikson's psychosocial theory of development was selected as the model upon which this study on aging is based. As a result, Erikson's theory is discussed in more depth in order to facilitate reader understanding of the dynamics which affect individual acceptance and coping style upon retirement and in the latter stages of the lifespan.

Disengagement Theory

Psychological theories on aging focus primarily on adult personality change. Perhaps the best known theory of this type is the disengagement theory. Lazarus and Delongis (1983) define disengagement theory as comprising an individual's beliefs about ". . . personal control over events or personal commitments to a set of values and ideals . . .[which] influences. . . how people assess and respond to change over the lifespan" (pp.245). With increasing age, most individuals tend to believe that they are less in control and they also perceive diminishing responsibility. In consequence, they disengage from commitments made earlier in the lifespan (Erikson et al,1986; Riker & Myers,1990).

The disengagement theory of development suggests that interactive processes such as social-psychological factors affect development. Disengagement theory may be viewed in a positive framework as it involves self-desired withdrawal from certain selected duties and obligations. Disengagement activity involves withdrawing from one's social and work roles (Markides & Cooper,1987). Neugarten (1968) says ". . . disengagement proceeds at different rates and different patterns in different people in different places and has different outcomes with regard to psychological well-being" (in Bloom,1984:374). If this is the case, then there will be considerable individual variation in the strength and direction of disengagement activities. With increased age an individual often finds he/she needs to eliminate unwanted and or unnecessary responsibilities from his/her life and focus on more preferred duties and activities. This becomes all the more important later in development as a person usually acts with the knowledge that time is finite and the length of the future is less certain than it was earlier in life. The disengagement theory is relevant to the present study as it illustrates that withdrawal from certain activities is adaptive rather than maladaptive. As well, disengagement theory highlights the importance of finding meaning and purpose in the interests/avocations that are retained.

Stage Theory

Levinson presents a stage theory of development. The individual is viewed from the perspective of his/her life structure. The life structure is "the basic pattern . . . of a person's life at a given time" (Levinson,1978:41). The lifespan is considered three dimensional as it includes the individual, sociocultural factors, and external world participation (Levinson,1996 & 1978). Levinson considers adaptation to aging as being a reconfiguration of the life structure of the individual. A person plays a multitude of roles over the lifespan: child, citizen, spouse, parent, and many others. These roles help define identity and purpose at each stage of the lifespan. As we age, we are often provided with fewer roles and must therefore, find more meaning in the roles we do possess (Levinson,1996 & 1978). The roles that an individual plays throughout life are important to understanding an individual's particular life history and life structure. The roles that a retired or elderly person plays are examined, in part, in the present study with the measure of the provision of social relations and via interests/avocations. Erikson's stage theory clarifies development in the later life stages.

Because Erikson's theory of psychosocial development presents progressive development as being predicated upon the resolution of earlier conflict and depicts development throughout the entire lifespan, it was the theoretical basis upon which the present study has been designed. Erikson emphasized that at each stage of development the individual is confronted with alternatives. An individual's selection of alternatives and resolution of conflict at earlier stages affects development at later stages. At each stage of development Erikson has identified pivotal polar conflicts which need resolution before positive development may proceed. These polar issues are contrasting needs which could be placed on a continuum from positive to negative. Positive developmental resolution would tip the scales toward the positive end of the

continuum whereas negative resolution would tip the scales toward the negative end. For example, the first polar issue Erikson identified involves the balancing of trust versus mistrust. The first developmental stage begins at birth and ends at approximately one year of age. The infant needs to develop both trust and mistrust (Erikson et al,1986). The infant needs to develop trust of caregivers and mistrust of strangers and danger. Successful resolution of a polar issue then, is not an either/or resolution but a balancing of two contrasting issues. Positive resolution means integration of both issues, but with a stronger resolution towards the positive end of the continuum. Positive conflict resolution provides the individual with a positive self-image and the skills necessary to successfully tackle the more complex issues that will come in the next stage of development. Instruments utilized in the present study were specifically chosen to determine if and or how decisions made earlier in life impact the later phases of the lifespan, and in particular, later maturity/old age.

Erikson's stage theory of personality development discusses all major life stages including old age. Freud's explanation, as well as many other theories, do not consider much development after puberty (Bloom,1980; Blythe,1980; Hayslip & Panek,1993). Erikson discusses lifelong development. He shows that middle adulthood merges with late adulthood and both are affected by experiences and choices made earlier in the lifespan. The polarity to be resolved in the middle adult years is "generativity" versus "stagnation". Generativity is concerned with learning and teaching. Stagnation is concerned with slowing down and preserving one's energy and strength. This stage is primarily focused upon assisting the next generation. Balance is the key to resolution of all stages and generativity and stagnation is no exception. The individual seeks to strike a positive balance between these opposites (Erikson et al,1986). In order to be successful at this stage of development, the individual needs to feel useful and purposeful in promoting the next generation in whatever way is personally meaningful to him/her. Additionally, successful adaptation involves

accepting that one may need more private time to look after oneself and one's own needs. If the individual resolves the generativity versus stagnation issue on the positive side of the pole, then he/she will have found meaning and purpose at this stage of the lifespan. If, on the other hand, the resolution is imbalanced or leaning toward stagnation, it may mean that the individual is disappointed about life and feels no sense of utility or purpose at this stage of life.

The essence of generativity involves the experience of "caring, nurturing, and maintaining" (Erikson et al, 1986:73). Reconciling generativity and stagnation means finding a balance between self-concern and concern for future generations. Erikson, Erikson, and Kivnick (1986) describe the function of generative responses as a person's responsibility for the "maintenance of the world" (p73). Giving up career and family responsibilities may begin in this phase of life as unique demands and opportunities are created as a function of the aging process. In striking a balance between generativity and stagnation, an individual who retires may shift his/her priorities to spend differing amounts of time on particular interests/avocations. In addition, often part of the rebalancing of priorities affects how much time is spent on social relationships. As well, the decisions that a person makes are predicated, in part, upon the state of his/her health and finances at the time of retirement. As a result, Eriksonian theory is of vital importance to the present study of successful retirement and aging. An individual's coming to terms with the finiteness of life may involve putting the house in order (i.e. setting up a will, deciding upon funeral arrangements and so forth) and seeking pleasure on a daily basis rather than living far into the future. Thus, the balance between generativity and stagnation is echoed in life satisfaction ratings.

Coming to terms with generativity involves the individual reexamining lifelong generative choices. For most of the people in the Erikson, Erikson, and Kivnick study, children were viewed as the greatest expression of generativity. "Procreativity has

overridden productivity and creativity as the major lifelong expression of generativity" (Erikson et al,1986:81). As a result, often these individuals have emphasized the growth and development of their children over the pursuit of their own talents and interests. Retirement and old age may provide a new opportunity for pursuit of self-interests. Grandparenthood too, may offer people a second chance at generativity (Erikson et al,1986; Severino, Teusink, Pender & Bernstein,1986). Just as there are developmental tasks in childhood and adolescence, old age has tasks to complete. Retirement and old age involve redefining oneself and one's identity. Grandparenthood is one way in which many people come to terms with anxieties about growing older, and readjusting to the dynamics of their new roles in the lives of their children and grandchildren (Erikson et al,1986; Severino et al,1986). The majority of elders have at least one child and live with or near a child (Chappell,1992). In caring for grandchildren a person is caring for both his/her child and grandchild. Grandparents are often needed as helpers in families where both parents work. Also, grandparents provide help when there is illness, divorce, or unemployment. Obviously, the stress on having a child, as the penultimate expression of generativity is, in part, a result of the generation Erikson et al studied. The option to remain childless was not available to most individuals of this generation (advanced birth control methods now provide many with the option to remain childless). Individuals who expressed their generativity in other ways such as in their work were less represented in the Erikson work. In the present study, life satisfaction level is used as a measure to rate how satisfied a person is with the choices he/she has made and as a result, with the life state he/she finds him/herself in. The life satisfaction index provides a measure to indicate how well the individual has resolved the final crises of development. The final stage in Erikson's theory involves balancing integrity and despair.

A final aspect of reviewing one's life of generativity is to assess one's ". . . overall philosophy of life, that is, with recognizing the extent to which his or her

worldview incorporates a broad sense of integral concern for the world and its people" (Erikson et al,1986:101). By reexamining his/her own life an individual may experience regret and be overwhelmed with pain or, alternatively, may find that old age is a new opportunity for growth and development. Whether the individual has successfully resolved the final crisis is indicated by his/her reported level of life satisfaction. Successful crisis resolution may also be shown by the correlations between reported levels of life satisfaction and other variables which contribute to successful retirement and aging such as control style and provision of social relations.

The developmental crisis of late adulthood (age 65 and over) is "integrity versus despair". Achieving integrity means finding a sense of completeness or wholeness in life. Despair, in contrast, is the state when one is unable to accept the realities of the finite lifespan, and the realization that the end of the lifespan is imminent (Erikson et al:1986; Hayslip & Panek:1993). Throughout the life cycle, individuals plan and anticipate the future; this trend naturally continues into old age (Erikson et al,1986). Planning and preparing for the future may be done with a recognition that the future may be less certain, but anticipating and planning for the future is the business of the living. Those who stop looking forward, despair. Some individuals, traditionally men, regard retirement as the freedom from earning a living while some women feel liberated from housekeeping and child-rearing. The options are as diverse as the people involved. Many postretirement activities are internally motivated and evaluated (Erikson et al,1986). Therefore, rather than deriving a sense of competency from a job well done, often the most important factor in pursuing an interest/avocation is in the exercise itself. Some individuals find delight and meaning in certain activities whereas others feel incompetent and diminished upon leaving their life work. Success in retirement then, is echoed in the measures of locus of control and of life satisfaction.

The Eriksonian psychosocial development theory seems best suited to the present study as it examines the later stages of development in great depth. Part of the

process of development in old age is undergoing a life history review. Often retirement serves as an inducement for this process. Accepting the inalterability of the past and accepting that one made the best decisions possible given the resources and knowledge he/she had at the time is a healthy resolution of the past. Not all persons can resolve or accept their past decisions, however, for some, past weaknesses, mistakes, and the perception of missed opportunities override strengths and positives.

In sum, the Eriksonian theory of psychosocial development suggests that at each stage of development, the tendency for growth surrounds a particular crisis issue which reaches ascendancy during a particular developmental stage of life. Achieving a favorable balance between polar issues such as generativity and stagnation, and integrity and despair, involves in part, the successful resolution of earlier polar issues, and as well, other variables external to the individual such as health and financial security. These measures are examined in the present study with the locus of control index, the illness behavior inventory, the financial status index and the life satisfaction index.

Common Misconceptions About Aging

There are common negative stereotypes about aging which are largely inconsistent with reality. The image of the infirm and sickly older person is often presented in the media and gives the mistaken impression that to be old means to be ill. Other factors contribute to the negative stereotyping of retiring and older persons. For example, even mandatory retirement at age 65, carries the implication that age 65 is followed by rapid physical and mental deterioration (Riker & Myers,1990). The attitudes that individuals have toward their own retirement are shaped by the attitudes of the society of which they are a part. In Japanese society, the elderly are involved in economically productive activities and viewed as economic assets. The majority of those who retire continue to work part-time as consultants or mediators for the companies they once worked for full-time (Markides & Cooper,1987). In Japanese society, attitudes toward the aging person's continuation of work are related to personal satisfaction levels experienced by the aging and retiring segment of their society. In contrast, American society has so strongly and repeatedly reinforced the belief that old age is synonymous with job loss, identity loss, health failure, purposelessness and other negative changes, that people, young and old alike, feel that there is nothing that people can do to change their fate (Riker & Myers,1990).

Four main myths are supported and strengthened by common stereotypes of aging. First, mandatory retirement which presents aging as sudden and rapid helps to create and perpetuate the myth that there is uniformity between persons in terms of aging. Second, the media and government typically present the image that older persons are unproductive and therefore financially draining and useless to developing society. Third, many theories present the idea that older persons prefer to live in isolation and withdraw from social activity. Fourth, older persons are often seen as inflexible, stubborn, and unwilling to adapt to change (Markides & Cooper,1987; Prentis, 1992; Riker & Myers,1990).

As many myths tend to hinder an accurate understanding of retirement and aging, they must be examined in order to expose their inaccuracies and misinformation. As a result, accurate and clear facts about aging may become known and knowledge may replace former ignorance. There tends to be an overall negative stereotype which permeates the minds of most individuals in respect to aging. Many negative images are erroneous. Many individuals believe, for instance, that most older persons end up living in institutions; in fact, only a small minority do (Milletti,1987). Similarly, many other misconceptions are shattered when one examines them: most older persons do not live alone, are not sick, are not senile, and are not miserably unproductive (Hayslip & Panek,1993; Liptzin,1994; Wette,1991). Statistics of the 1980s reveal that there were more than 26 million people over 65 in the United States (Skinner & Vaughan,1983:19). Of these individuals only 5% live in institutional homes while 15% live with relatives. That leaves 80% of the senior population living independently. Of this group, 80% are in moderate to good health (Skinner & Vaughan,1983:20). These statistics run counter to the stereotypes of aging commonly held.

If retiring persons are encouraged to play new roles and exposed to new outlets which enable them to participate in society, they themselves may experience retirement and old age as a more positive life stage. Experiments having senior citizens and young children work together and learn have shown that given more meaningful relations with others, and more satisfying interaction with the world, keeps seniors more mentally active and emotionally healthy (Kennedy, 1991; Markides & Cooper,1987).

Since 1900 the percentage of people in the United States over age 65 has tripled from four percent to 12.6%. In 1991, more than 12% of the American population were over 65. In America, at least 30 million people are retired and this figure does not include persons who are semi-retired (Hayflick,1994:6). If these figures hold relative to Canada, then about 3.36 million Canadians are retired.

A child born in 1991 can expect to live about 75 years. This is 28 years longer than he/she could have expected to live in 1900 (Hayflick,1994:57-58). As a result, careful planning is needed to make sure that a person has the physical, financial, and psychological resources he/she needs to successfully or optimally retire. In the past, animals, man included, rarely, if ever, reached old age. Of three hundred Neanderthal skeletal remains examined, only one may have been a post-menopausal woman (Hayflick,1994:191). A retirement period of possibly two decades is new to humans and, as a result, many are ill-equipped to cope with the demands retirement brings. Therefore, information about how to enjoy retirement successfully must be studied and collected. This is one of the research goals of this study. As negative stereotypes, myths, and poorly-formed concepts have confounded understanding of retirement and aging, many individuals fear aging and do not believe that individual choices can significantly affect the ability to achieve a successful and satisfying retirement and old age. However, as the myths are explored it becomes apparent that there are differences between normal and pathological aging and in order to place aging in a more realistic context, these differences need to be recognized and acknowledged.

The Gerontological Field

As has been mentioned, the population in North America is aging and living longer. As a result, retirement has become a more important phase of life. The twentieth century is, in fact, the first century in which retirement has become an important issue (Markides & Cooper, 1987; Riker & Myers,1990; Sherron & Lumdsen,1978). In the past, individuals, for the most part, worked throughout their entire lives. In 1955, Donahue's book, Education for Later Maturity heralded the beginning of a realization that leisure might be taught and necessary for, aging persons (Sherron & Lumsden,1978). Educational programs may affirm the growth and development potential individuals have at every stage of development. Educational

gerontology may be defined as the study and practice of designing and providing educational experiences and activities for aging and aged individuals (Sherron & Lumsden,1978). Educational gerontology has as a primary objective educating people about the aging process. The content and focus of the programs tend to be on expressive outcomes which are part of the learning process rather than on delayed gratification (Spar & La Rue,1990). A vital part of the educative process is to help people, young and old, lay and professional, acknowledge the reality of aging and begin to plan and prepare for it before retirement is reached (Markides & Cooper,1990; Prentis,1992). The author of the present study sought to see if and how five variables affect success or satisfaction with retirement as a later stage in the life cycle. Interests/avocations and the provision of social relations are examined in the present study to ascertain the impact of these variables on life satisfaction. The information uncovered may then educate people to make wiser choices as they prepare for retirement and old age.

To optimize enjoyment and satisfaction in retirement one has to focus upon two related matters. First, it is necessary to identify factors which reduce the impairments of disease, finance, and psychological problems. Second, it is useful to also identify opportunities to improve health, finances and psychological well-being. These are the goals of the present study. These factors and potentialities are examined by measuring interests/avocations, financial status, provision of social relations, locus of control style and illness behaviors and determining their potential impact upon life satisfaction levels at and during retirement.

By gathering information from and about successful agers, the knowledge base about those factors which enhance one's opportunities for achieving and maintaining a healthy happy retirement and old age may be increased; as a result, the knowledge may be shared and used by individuals to appropriately plan for their retirement. "[People] are born, work, love, suffer and die; and they are followed by others, and so on and so

on" (Tournier,1971:15). Given that there are such great commonalties between the lives of human beings it makes sense that knowledge may be gathered from previous generations which will help later generations to be better prepared for some of the normal and recurrent lessons of life. To that end, this study is dedicated. A consideration of the specific key factors underpinning life satisfaction appear in the next section.

Key Variables Associated With The Process Of Retirement And Adjustment To Old Age

Introduction

Based upon the literature review, five key variables have been selected for the present study on successful retirement and aging. These variables were recurrent in the literature as factors which have an impact, either positive or negative, on the aging process and either facilitate or diminish the potential for having a successful and satisfying retirement. The five variables selected and measured are: interests/avocations, financial status, provision of social relations, locus of control style, and illness behaviors. These variables have been measured and correlated with life satisfaction. The variables are discussed in the following section which also indicates why each variable is an important factor affecting successful retirement and aging.

Variable 1: Interests/Avocations

The interest/avocation variable may be crucial, but it is often overlooked in studies about retirement and aging. Gordon (1984) suggests that the more multi-faceted people's interests are earlier in life, the more likely they will be active in retirement. He states that during the work years an individual must pursue interests and avocations. These will assume a more vital role upon retirement, and without them, a retired person will become bored and feel purposeless (Gordon,1984:16). Retired

people, like those people who are not retired, need to feel useful and purposeful (Erikson et al,1986; Nadelson,1990).

During earlier stages of development many people dream of having free time. North Americans, on average work 12 hours a day (Novak,1985). Add to this the time required to perform basic toiletries and the daily requirements of eating, sleeping, and commuting, and this leaves the average person a mere four hours of free time. However, upon retirement free time is more than doubled (Riker & Myers, 1990). A study of 5,000 retired persons in the United States revealed that they had on average 8.3 hours each day for leisure. In a 20 year retirement, that adds up to 60,000 hours (Novak,1985). What do retired people do then? Statistics Canada in 1979 revealed that 40% of retired people spend more time watching television than any other leisure activity (Novak,1985). Watching television is not a healthful, purposive, or meaningful pursuit. It may not fulfill the need for social exposure or the need for useful work (Markides & Cooper,1987; Prentis,1992, Riker & Myers,1990). In consequence, it is necessary to examine what other interests and avocations successful persons pursue throughout life and, especially upon retirement. The ideal situation for a person is to have so many interests/avocations that retirement does indeed provide an opportunity for the person to pursue these interests he/she could not find sufficient time for earlier in the life cycle (Bloom,1984; Crawford,1979; Hunnisett,1981; Sulamith,1972; Watters,1988). Then, there is no real adjustment to be made regarding free time.

What a person does during retirement is not so important as the significance it holds for a person. The actions of the person must be meaningful and purposeful to the individual if he/she is to feel vital and successful (Nadelson,1990) Tournier (1971) notes that ". . . [All] leisure activity is a kind of initiation into new aspects of life" (p.33). If an individual does not experiment with new activities before retirement, it is unlikely that he/she will be experimental after retirement. Instead, fear of the unknown

may force the individual to stagnate and to shun new experiences and pursuits. According to Bloom (1981) the major developmental task of old age is to ". . . clarify, deepen, and find use for what one has already obtained in a lifetime of learning and adapting" (p355). Some people can and do become creative for the first time in old age such as the American painter Grandma Moses, but the rudiments were there even if the individual never previously had a chance or time to use those skills. However, rigid persons may deny themselves the joy of finding new outlets for their talents and skills. Therefore, personality variables such as locus of control impact life satisfaction upon retirement.

Variable 2: Finances

In Canada, being old often means being poor. The National Council of Welfare (1987), a citizen's advisory board, stated that at least one aged Canadian in four was living on low income or below the poverty line (Marshall,1987). Only 1 in 10 Canadians retired with 'financial dignity'. Financial dignity is defined as having the ability to " . . . do what you want when you want where you want and with whom you want" (Watters,1988:168). Having adequate finances to be comfortable in retirement is a crucial ingredient to a successful retirement (Gordon,1984; Hunnisett,1981; Novak,1985; Sulamith,1972; Watters,1988). Planning for financial security must begin long before one reaches retirement and old age. A part of the planning process has to be the acknowledgment that aging is inevitable and retirement is a good possibility. Without appropriate planning and preparation for retirement, a person may end up severely limited financially and as a result, unsatisfactorily retired.

> Whatever other factors researchers have identified as important for a successful retirement, your health and financial security are the two most important (Gordon,1984:204).

Financial difficulties often cause older persons to feel distrustful and as a result, they decrease their social ties. The effect is increasing isolation of the individual (Krause,1991). Financial strains affect virtually all aspects of the life of an aging person. A lack of finances may be detrimental to health, curtail the ability to pursue interests/avocations and friendships, and decrease one's feelings of self-worth and self-control. In the present study, financial status was examined to see how it affected the pursuit of interests/avocations and the provision of social relations. Also, financial status was investigated to see if it correlated to illness behavior and life satisfaction.

Variable 3 Social Relations

The primary caregivers for the elderly are family members. Over 80% of all care for elderly persons living in the community is provided by family members (Dychtwald & Flower,1989; Nette,1991). Nearly 90% of caregivers are female adult children (Dychtwald & Flower,1989:240). Caregiving children often offer money in addition to time. Many adult children cannot cope with the demands of aging parents and as a result, aging agencies and services are growing.

It is from social relationships that an individual gains a sense of self-worth. Feelings of self-worth are likely to suffer for older persons cut off from stable contact with family and friends (Erikson et al,1986; Isbister,1989; Johnson & Troll, 1992; McKenzie,1980). Indeed, affective ties are often selected as the most meaningful aspects of a person's life - especially for older persons (Heynen,1990; Isbister,1989; Kaufman,1987). After retirement, the network of friends from work is often lost (Hunnisett,1981). These social networks and support systems must be replaced. Often the family, spouse, children, and grandchildren become a source of stronger association upon retirement.

Grandparenthood can provide a purpose for retired and aging persons depending upon proximity to offspring. It is a great source of pride and satisfaction for

many retired persons (Comfort,1977; Knopf, 1975; Severino, Teusink, Pender, & Bernstein,1986). Grandparents and grandchildren often have very satisfying relationships because the grandparent has the time to devote to a grandchild and the wisdom gleaned from a lifetime of experience to guide him/her (Erikson et al,1986; Isbister,1989; Kennedy,1991). For those who live alone, support ties are even more crucial as married persons can fall back on their spouses for support. If a spouse is not available, a child is usually the main source of support for an impaired aging parent (Johnson & Troll,1992). Research strongly suggests that those persons with children are in the best shape for getting appropriate care, help and attention (Johnson & Troll, 1992). Thus, family and long-term friends provide both social and mental support. Persons encountering stressful events frequently turn to significant others for support. If individuals are isolated from loved ones they tend to withdraw and not seek appropriate help (Krause,1991).

The friends and social networks a person has developed throughout life may not be remade easily if a person moves late in life. Retiring and older persons often think of moving away, often to kinder climates. This is often a mistake. Although certainly not all persons retiring are parents, a great percentage of them are. The need to be near family, children, and lifelong friends is made much stronger by aging (Erikson et al,1986; Johnson & Troll, 1992). Distance separates and divides people.

All persons need to be understood and loved; it is a fundamental human need according to the humanists (Tournier,1971). Neither the young nor the aged are producers. They need to be loved for who they are, not for what they do. Longtime friends and family offer this outlet. Many doctors and social service workers report that the elderly often visit them just for company and to have someone pay attention to them (Comfort,1977; de Beauvoir,1977; Tournier,1971). In the present study, the researcher examined locus of control style, provision of social relations, and illness behavior to ascertain how they affected life satisfaction upon retirement.

Variable 4 Locus Of Control

"Success in retirement depends essentially on how well you have developed your personality beforehand" (Tournier,1971:22). Personality has two primary definitions: one focuses mainly on external behaviors and the other focuses upon internal characteristics. Hall and Lindzey (1970) present the most all-inclusive definitions. First, "an individual's personality is assessed by the effectiveness with which he/she is able to elicit positive reactions from a variety of persons under different circumstances" (p.9). This definition focuses on social skills and behaviors. The second definition of personality considers the ". . . personality of the individual to inhere in the most outstanding or salient impression he/she creates in others" (p.9). This second definition entails viewing personality as being primarily internal.

Taken together, these definitions of personality include both the identifiable internal traits an individual possesses as well as those aspects of personality which may be extrapolated by examining overt behaviors. Certain personality traits and behaviors will be more adaptive and more functional than others. It may be that those persons possessing and or exhibiting certain positive traits may find that they are more successful and better able to cope with the changes aging brings. Personality variables such as agreeableness, openness to experience, and extroversion may affect the strength of social relationships.

One important personality variable recurrent in the literature on successful retirement and aging involves locus of control. There are two basic control styles. The first is the personal style in which the individual believes in the internal intrinsic ability to set and achieve goals; this type of style is primarily internal. In contrast, an external locus of control style would be typified by persons who perceive themselves as having little control over their lives. Overall, persons with a primarily internal locus of control style feel they have more control over what happens in their lives whereas those with a

primarily external style feel more like victims of fate and chance (Riker & Myers,1992). Aldwin (1991) determined that an individual with an internal locus of control was more likely to take instrumental action to cope with changes and as a consequence, felt control over his/her fate and mastery over the environment. In contrast, those individuals with an external locus of control were likely to try escaping the inevitable changes life brings; thus, they were prone to depression and anxiety (Aldwin, 1991; Heckhausen, Jutta, & Baltes;1991). Locus of control may affect social style and health as a result. Thus, it appears likely that locus of control will have a major impact upon achieving a successful retirement and old age. Locus of control was selected as an important variable to be assessed among the participants of the present research.

Variable 5: Illness Behavior

> There is tragedy in the physical transformation of the human body, and the mind has to live with this transformation, although it is unchanged itself except for the social and apparent changes in its vehicle . . . Older people are, in fact, young people inhabiting old bodies and confronted with the physical problems of reduced vigour, changing appearance, and, although many escape these, specific disabilities affecting such things as sight and agility (Comfort,1977:19-20).

The costs of health care are rising and many services previously provided for under Canadian Medicare are no longer included. It seems reasonable to predict that health status will increasingly be influenced by financial status. Insofar as they can control it, people must take more active responsibility to ensure that they arrive at retirement and old age with decent health.

(With the recognition and understanding that many diseases and illnesses are not truly curable or alterable), Statistics Canada states that "[t]he only real 'cure' for chronic diseases is prevention through environmental and or lifestyle change" (Novak, 1985:85). More and more, individuals will need to engage in healthful behaviors such as better nutrition and exercise routines to ensure that they maintain good health. The best health care system can only "ease pain and extend life" (Novak,1985:85). That does not ensure any decent quality of life. Therefore, it is up to the individual to engage in healthful behaviors throughout the lifespan. Genetics and environment affect our health, but so do our own personal lifestyle choices (Prentis,1992; Riker & Myers,1990). Lifestyle behavior is the one area over which an individual can maximize control and eliminate or minimize such risky behaviors as eating fatty foods, smoking, and avoiding exercise.

Research has shown that "self-imposed risks and the environment are the principal or important underlying factors in each of the major causes of death [car accidents, accidents, heart disease, respiratory and lung diseases, and suicide] between ages 1 and 70" (Novak, 1985:87). A full sixty percent of all deaths may be traced to

lifestyle and or environmental cause (Novak,1985). Clearly then, an individual does exercise considerable control over his/her health. A 69 year old female makes clear the connection between physical and mental health with her statement:

> Being healthy is a key to growing older gracefully, elegantly, any way you want to say it. Most people only think about being physically healthy, but that is only half of the story - a healthy, stimulated mind is the other half (Lonetto & Duncan-Robinson,1989;69).

Both mind and body must be looked after in order that retirement and old age may be optimally achieved.

The Gerontological Society of America was formed in 1945. Their motto is "To add life to years, not just years to life" (Hayflick,1994:4). This motto was formulated with a clear recognition that without health, prolonging life may not be worthwhile.

Summary

Good health, financial security, a measure of self-control, interesting activities to pursue and people to share life with appear to be some of the key ingredients in building a recipe for successful retirement and aging. As a result, the researcher has selected instruments to evaluate these variables and to see if and or how they affect and interact with reported level of life satisfaction upon retirement and eventual old age. The literature reviewed and the instruments selected carry implicit questions which now may be formalized as research hypotheses.

HYPOTHESES

Hypothesis 1

There is a relationship between the number and strength of interest/avocation participation individuals have and their potential for successful retirement as measured with the Life Satisfaction Scale.

Hypothesis 2

There is a relationship between the financial situation individuals have and their potential for successful retirement as measured with the Life Satisfaction Scale.

Hypothesis 3

There is a relationship between the adequacy of provided social relations individuals have and their potential for successful retirement as measured with the Life Satisfaction Scale.

Hypothesis 4

There is a relationship between the locus of control style individuals have and the potential for successful retirement as measured with the Life Satisfaction Index Z Scale.

Hypothesis #5

There is a relationship between the illness behaviors of an individual and their potential for successful retirement as measured with the Life Satisfaction Scale.

Hypothesis 6

There may be interrelationships between the variables.

CHAPTER III

RESEARCH DESIGN, INSTRUMENTS, AND PROCEDURES

Introduction and Design

The present study was designed as a correlational study which examines factors that potentially affect satisfaction with retirement. Adjustment to retirement and aging is affected by antecedent behaviors, choices, and attitudes. In reviewing the literature on retirement and aging, five major variables appear to affect the chance of achieving a successful retirement and old age. These five variables are: interests/avocations, financial situation, provision of social relations, locus of control style, and illness behavior. These variables were measured and correlated to a sixth variable, life satisfaction. As a result, the hypotheses tested in the present research reflect the relationships and interrelationships between the identified variables.

Participants

There were 26 participants in the study. Of these, eight were male and 18 were female. Approximately one half of the participants were from small towns and or rural areas while the remainder were from urban areas. All participants were retired or semi-retired from their primary lifetime profession or career at the time of testing. Participants were from the middle classes.

The mean age of the group was 69.7. The median was 70.5. The mode was 73. The youngest participant was 56 and the oldest participant was 85. The age range was 29 years. The standard deviation was 6.3.

Individuals were selected in Edmonton and surrounding area in three primary manners. Some participants attended general meetings for flower enthusiasts. Some participants were recruited at antique shows or through the Society for the Retired and Semi-Retired. In addition, 4 participants were found through professors, and

colleagues who mentioned persons that might be willing to participate in an anonymous study on aging. All participants were given instructions in writing and or in person by the researcher. Additionally, each participant was given a stamped envelope addressed to the researcher and asked to send the information back to the researcher either complete or incomplete.

The extremely poor and extremely wealthy are not included in the study. Illiterate individuals either could not or would not participate in the study. Further, the current study did not attempt to represent the diverse multicultural population now inhabiting Canada as aged persons in the past have been primarily of European descent.

Procedures

The experimental design included one administration of the six instrument scales with each individual. Data were collected between January and June 1996. Completed instruments were received either personally by this researcher or through the mail.

Each individual was informed verbally, and in written form, of the purposes of the study and of his/her right to withdraw as a voluntary participant. The study purpose explanation and consent form is presented in Appendix A.

Instruments

1. The Interest/Avocation Index (IAI) is an 18 item questionnaire designed to measure interest/avocation strength and style. (See Appendix C.) The questionnaire was designed by the researcher of the present study based upon information from literature examined during the literature review (Brecher,1984; Costa, Metter & McCrae,1994; Gordon,1984; Hall & Lindzey,1970; Hayflick,1994; Howard, 1978; Hunnisett, 1981; Johnson,1986; Knopf,1975; Novak,1985; Sulamith,1972; Tournier,1971). Each item employs a rating scale from 1 to 7, with seven being the

highest score. Higher scores indicate a greater number and diversity of personal interests/avocations.

2. The Financial Situation Index (FSI) is an 18 item instrument designed to assess an individual's financial security and comfort level. It is shown in Appendix D. It was adapted from the Smith and Kendall financial scale, developed in 1969 as part of the Retirement Descriptive Index (RDI). Of the 18 items, 9 are scored as correct if the answer is yes and 9 are scored as correct if the answer is no. Scores may range from 0 to 18 with higher scores being reflective of a better financial index.

The items in the FSI are general rather than specific and were designed for older persons who may be reluctant to disclose personal financial details.

3. The Provision of Social Relations Index (PSR) is a 15 item instrument designed to measure components of social support. It was designed by Turner, Frankel, and Levin (1983). It is shown in Appendix E. The PSR focuses upon family and friend support systems.

The PSR was developed in a series of studies involving 1,712 participants. Test reliability ranges from .75 to .87. The PSR has good concurrent validity and it correlates significantly with the Kaplan Scale of Social Support. High scores reflect more social support. The PSR is negatively correlated with several measures of psychological distress (Concoran & Fischer,1987).

The PSR is scored by reverse-scoring items 7 and 15 and then summing the item scores on the other items. Each item has a value range between 1 and 5. The maximum possible score is 75. Lower scores are reflective of a more positive situation.

4. The Internal Control Index (ICI) is a 28 item instrument designed to measure where a person finds and expects to find reinforcement. Test reliability ranges from .84 to .85. The ICI has fair concurrent validity and significant correlation with Mirels' Factor I of the Rotter Internal-External (IE) Continuum of Locus of Control Scale which is a standard battery used to assess locus of control. The ICI is shown in Appendix F. The stated purpose is to provide a measure of locus of control. (Concoran & Fischer,1987).

Each item is scored on a five point scale. Higher scores reflect a higher internal locus of control style. Half of the items are worded so that highly internally oriented persons would answer at the 'usually' end of the scale whereas the other half are worded at the 'rarely' end. The 'rarely' response is scored as 5 points on items 1, 2, 4, 6, 8, 11, 14, 17, 19, 22, 23, 24, 26, and 27; for the remainder of the items the response 'usually' is scored as 5 points. This produces a possible range of scores from 28 to 140 with higher scores reflecting higher internal locus of control.

5. The Illness Behavior Inventory (IBI) is a 20 item scale designed to measure illness behavior. Illness behavior is assessed by determining the behaviors performed or reported by a respondent that indicate whether or not he or she is in poor health. It may then be used as a health index. It is shown in Appendix G. Two facets of illness behavior are measured: work-related illness behavior and social illness behavior. Internal reliability ranges from .88 to .89. The IBI has excellent stability with two-week test-retest reliabilities of .90 overall. It is scored on a six-point Likert scale. High scores indicate greater illness behavior. It is a useful clinical measure as it shows inappropriate illness behavior and correlates well with many aspects of medicine usage (Concoran & Fischer,1987).

6. The Life Satisfaction Index Z (LSIZ) is an instrument specifically designed to measure the psychological well-being of the elderly. It was selected for this study as it is designed to assess satisfaction in retired and elderly persons and it may be administered either orally or in writing. It is a shortened version of the original Life Satisfaction Index (LSI) which is much longer and more difficult for participants to complete. Items on this LSIZ were selected from the original LSI because they were demonstrated to discriminate between high and low scorers. Neurgarten, Havighurst, and Tobin designed the LSIZ for retired and aging persons specifically. It is shown in Appendix H. It is an 18 item instrument designed after extensive study of satisfaction in the elderly. Test reliability was not reported but rating scales from which the LSIZ was developed had excellent inter-observer agreement. No other reliability data were reported (Concoran & Fischer,1987).

The LSIZ is scored by assigning one point to each correctly answered question. A correct score is "agree" on items 1, 2, 4, 6, 8, 9, 11, 12, 13, 14, and 17. Other items are correct if the answer is "disagree".

Data Analysis

The data were entered into Excel (5.0) and the Statistical Program for the Social Sciences (SPSS 6.1.1) for analysis. Descriptive statistics were calculated for each of the variables for all participants as well as for males and females separately. An independent t test was performed to examine whether satisfaction with retirement differed across genders. Simple linear regression equations were written for each of the variables. In addition, correlations among each of the 6 variables were examined. First, all participant data were grouped together for linear analysis, then separate analyses were conducted for males and females. Finally a multiple regression analysis was conducted to determine which variables were the best predictors of life satisfaction. First, males and females were collapsed for an overall analysis; then, a multiple

regression analysis was conducted on males and females separately. Variables which showed a statistically significant correlation with satisfaction were examined in a step-wise analysis. As well, descriptives were calculated for all participants together and then for males and females separately.

CHAPTER IV

RESULTS

Introduction

Upon completion of data collection, descriptive statistics were calculated. These are noted in the text and via specific data tables (see Table I, II and III). Means for all six inventories and for all participants were derived. A correlation matrix was also prepared from the individual correlations calculated to test the hypotheses (see Table IV). Correlation matrices were also created for males and females individually (see Tables V and VI). Finally, a multiple regression analysis was conducted in order to determine which variables predicted life satisfaction and to assess variable interaction effects. Criterion significance was set at or beyond a .05 level. Four of the five variables correlated significantly with life satisfaction. In addition, three statistically significant interrelationships were found to exist amongst the variables themselves.

To assist the reader in recall each research hypothesis is summarized. The specific analytic procedures used to test each hypothesis are offered with the findings, and finally, the conclusions permitted by the findings are offered. Discussion of the findings and their implications are presented in Chapter V.

DESCRIPTIVES

For each variable descriptive statistics are presented. The mean, standard deviation, range, and minimum and maximum reported scores are tabled. In Table I, the statistics for all participants are displayed. Life satisfaction levels reported for all participants combined has a range of 5 to 16 on a scale from 1 to 18. In addition, there is a considerable range in the number and strength of interests/avocations; there was an 89 point range between minimum and maximum scores. Tables II and III show the statistics for the participants when men and women are separated. Overall, the standard

deviations and ranges are similar for both men and women. However, there is a moderate difference between standard deviations for the measure of provision of social relations: males at 3.30 and females at 9.83; this suggests that there is greater variability on the social relations scale for females than there is for males. When the means of men and women on life satisfaction are compared there is no significant difference (t (24) = .66, not significant).

TABLE I

Individual Descriptive Statistics for All 6 Variable Measures For All Subjects Together

Variable	Mean	SDev	Range	Min	Max
1 Interests/Avocations	67.04	23.53	89	12	101
2 Finances	13.31	2.90	11	6	17
3 Provision/Social Relations	29.04	8.47	37	15	52
4 Internal Locus of Control	107.65	8.32	36	86	122
5 Illness Behavior	52.08	10.04	48	35	83
6 Life Satisfaction	11.92	2.93	11	5	16

TABLE II

Individual Descriptive Statistics for All 6 Variable Measures For Males Only

Variable	Mean	SDev	Range	Min	Max
1 Interests/Avocations	75.5	26.89	83	18	101
2 Finances	13.88	2.90	8	9	17
3 Provision/Social Relations	26.5	3.30	11	21	32
4 Internal Locus of Control	109	8.11	21	97	118
5 Illness Behavior	50.25	7.74	23	39	62
6 Life Satisfaction	12.5	2.45	8	7	15

TABLE III

Individual Descriptive Statistics for All 6 Variable Measures For Females Only

Variable	Mean	SDev	Range	Min	Max
1 Interests/Avocations	63.28	21.63	80	12	92
2 Finances	13.06	2.94	11	6	17
3 Provision/Social Relations	30.17	9.83	37	15	52
4 Internal Locus of Control	107.06	10.26	36	86	122
5 Illness Behavior	52.89	11.02	48	35	83
6 Life Satisfaction	11.67	3.14	11	5	16

TESTING SPECIFIC HYPOTHESES

Hypothesis One

There is a relationship between the number and strength of interest/avocation participation individuals have and their potential for successful retirement as measured with the Life Satisfaction Index Z Scale (LSIZ). To test hypothesis 1, a Pearson Product Moment Correlation between strength of Interest/Avocation scores and LSIZ scores was calculated for all 26 participants. The r value was .145 which is suggestive of no clear relationship (see Table I). Since a correlation coefficient of .145 does not reach criterion significance of $p < .05$, hypothesis 1 is rejected. No statistically significant correlation existed when male and female data were separated (See Tables V and VI).

Hypothesis Two

There is a relationship between the financial situation individuals have and their potential for successful retirement as measured with the Life Satisfaction Index Z Scale. To test hypothesis 2, a Pearson Product Moment Correlation was calculated between the Financial Status Inventory and the LSIZ scores of all 26 participants. The finding was that there was an $r = .645$ (see Table I). As a correlation coefficient of .645 exceeds criterion significance, hypothesis 2 is accepted. Male and female differences were calculated: for males $r = .774$ and for females $r = .600$ (See Tables V and VI). The gender differences suggest that finances predict more variability in satisfaction for males than for females though satisfaction is impacted moderately for both genders.

Hypothesis Three

There is a relationship between the adequacy of provided social relations and the potential for successful retirement as measured with the Life Satisfaction Index Z Scale. To test hypothesis 3, a Pearson Product Moment Correlation was calculated between scores in the Social Relation Index and the LSIZ scale for all 26 participants. The finding was that r = -.436. (See Table I). A correlation coefficient of -.436 exceeds criterion significance of .05, so hypothesis 3 is accepted. When male and female data were separated extreme differences were found: for males r= .071 and for females r= -.489 (see Tables V and VI). Note that low scores on the social relations scale were indicative of a more positive situation. Thus, a negative correlation between social relations and life satisfaction indicates that those with stronger social ties tend to be more satisfied upon retirement. Gender differences were significant for these measures. For females, provision of social relations correlated with life satisfaction whereas for males it did not.

Hypothesis Four

There is a relationship between the locus of control style of individuals and their potential for successful retirement as measured with the Life Satisfaction Index Z Scale. To test hypothesis 4, the Pearson Product Moment Correlation was calculated between scores on the Locus of Control Index and the LSIZ Scale for all 26 participants. The finding was that r= .414 (see Table I). As a correlation coefficient of .414 does meet criterion significance level, the decision is to accept hypothesis 4 at the .05 level of significance. When male and female data were separated for examination, the results correlated as follows: for males r= . 014 and for females r= .506 (see Tables V and VI). Thus, when gender was examined as a factor, locus of control only remained an important predictor variable for females.

Hypothesis Five

There is a relationship between the illness behaviors individuals have and their potential for successful retirement as measured with the Life Satisfaction Index Z Scale. To test hypothesis 5, the Pearson Product Moment Correlation was calculated between the scores on the Illness Behavior Inventory and the LSIZ for all 26 individuals. The finding was that r = -.272. A correlation of -.272 meets criterion significance and so hypothesis 5 is accepted (see Table I). When male and female data were separated the differences were as follows: for males r= -.467 and for females r= -.213 (See Table V and VI). Note that low scores on the social relations scale were indicative of a more positive situation. Thus, there is a negative relationship between illness behaviors and life satisfaction for both females and males; however, the relationship is stronger for males than females.

Hypothesis Six

Certain interrelationships between the variables existed. Male and female data were separated and at times the correlations between variables were statistically significant for one gender alone.

To text hypothesis 6, a correlation matrix was constructed. Three statistically significant interrelationships were identified between variables.

A) There is a statistically significant relationship between Provision of Social Relations and Illness Behavior. The correlation coefficient r= 0.406 exceeds criterion significance. Thus, hypothesis 6 is accepted for the relationship between Provision of Social Relations and Illness Behavior.

When data are examined separately for males and females, differences are apparent. For males the correlation coefficient between life satisfaction and illness behaviors is -.467 whereas for females the correlation coefficient is -.213. This finding

suggests that illness behaviors have a greater impact on life satisfaction for females than for males.

B) There is a statistically significant relationship between Locus of Control and Finances. The correlation coefficient of .378 meets criterion significance. Thus, hypothesis 6 is accepted and supported from the relationship between Locus of Control and Finances. When data are examined separately for males and females, differences are apparent. For males the correlation coefficient between locus of control and finances is -.401 whereas for females the correlation coefficient is .620. This finding suggests that for males having an internal locus of control style did not promote satisfaction with financial status. In contrast, for females having an internal locus of control was related to satisfaction with financial status.

C) For males only there was a strong negative correlation between Locus of Control and Provision of Social Relations. The correlation coefficient is -.861 for males whereas for females the correlation coefficient between locus of control and provision of social relations is negligible at -.024. Again, note that low scores on the social relations scale were indicative of a more positive situation. Thus, a correlation of -.861 here suggests that when there are more social relations for males they feel more internal control.

Summary

In general then, the findings are that no statistically significant correlation exists between the Interest/Avocation Index and the Life Satisfaction Index. Statistically significant relationships were found to exist between the Life Satisfaction Index and each of the following indices: the Financial, the Provision of Social Relations, the Locus of Control Style, and the Illness Behaviors Index. When males and females are

separated Provision of Social Relations only correlated strongly for females (r=-.489 for females, r=.071 for males). In addition, three statistically significant interrelationships were found to exist between the variables themselves. There is a statistically significant correlation between Provision of Social Relations and Illness Behavior, and Locus of Control and Finances. Finally, Locus of Control and Provision of Social Relations correlated for males only.

MULTIPLE REGRESSION ANALYSES

Predicting Satisfaction

A multiple regression analysis was conducted to determine the impact of each of the 5 variables on predicting life satisfaction. All variables together correlated at .81 with life satisfaction predicting 66% of the variability for life satisfaction (R=.81, R2=.66). When a stepwise procedure was employed for men only, one predictor was retained: finances (R=.77, R2=.66). Thus, 66% of the variance in life satisfaction for males is accounted for by finances. The standardized beta coefficient (B) of the regression equation for males indicated that finances were weighted the most (B=.77). When a stepwise procedure was employed for women only, two predictors were retained: finances and provision of social relations. Finances were the strongest predictor for females (R=.60, R2 =.36). When the second step was added to include provision of social relations with finances the correlation was increased (R=.75, R2=.56). Thus, together finances and provision of social relations accounted for 56% of the variability in life satisfaction for females. The standardized beta coefficient of the regression equation for females indicated that finances were weighted the most (B =. 57) but, the provision of social relations also accounted for a portion of the variability (B= -.45).

TABLE IV

Correlation matrix of predictors of satisfaction for all subjects.

	(X1)	(X2)	(X3)	(X4)	(X5)	(X6)
(X1)	*1.00	-.005	-.082	-.179	.126	.145
(X2)	-.005	*1.00	-.049	.378	-.145	.645
(X3)	-.082	-.049	*1.00	-.120	.406	-.436
(X4)	-.179	.378	-.120	*1.00	-.137	.414
(X5)	.126	-.145	.406	-.137	*1.00	-.272
(X6)	.145	.645	-.436	.414	-.272	
	*1.00					

TRANSLATION CHART FOR CORRELATION MATRICES

X1 = Interests/Avocations

X2 = Financial Status

X3 = Provision of Social Relations

X4 = Locus of Control Style

X5 = Illness Behaviors

X6 = Life Satisfaction

* refers to when the variable is correlated with itself and thus is a perfect positive correlation.

Comments

Overall the matrix reveals that of the 5 variables identified as measures that may correlate to life satisfaction, only 4 do. In addition, of the 5 hypotheses, 6 have some statistical support. Male and female data are separated in the next two matrices.

TABLE V

Correlation matrix of predictors of satisfaction for male subjects only.

	(X1)	(X2)	(X3)	(X4)	(X5)	(X6)
(X1)	*1.00	.065	.610	-.344	.243	-.106
(X2)	.065	*1.00	.307	-.401	-.520	.774
(X3)	.610	.307	*1.00	-.861	.062	.071
(X4)	-.344	-.401	-.861	*1.00	.232	.014
(X5)	.243	-.520	.062	.232	*1.00	-.467
(X6)	-.106	.774	.071	.014	-.467	
	*1.00					

TABLE VI

Correlation matrix of predictors of satisfaction for female subjects only .

	(X1)	(X2)	(X3)	(X4)	(X5)	(X6)
(X1)	*1.00	-.092	-.149	-.162	.141	-.222
(X2)	-.092	*1.00	-.070	.620	-.022	.600
(X3)	-.149	-.070	*1.00	-.024	.434	-.489
(X4)	-.162	.620	-.024	*1.00	-.209	.506
(X5)	.141	-.022	.434	-.209	*1.00	-.213
(X6)	-.222	.600	-.489	.506	-.213	
	*1.00					

CHAPTER V

DISCUSSION

Introduction

The purpose of the present study was to determine if certain variables affected level of satisfaction and well-being upon retirement and old age. The selected variables were: interests/avocations, financial status, provision of social relations, locus of control style, and illness behaviors. These variables were then correlated to life satisfaction and as well were examined to see if cross-correlations appeared between the variables themselves.

In order to determine whether there were gender differences in life satisfaction upon retirement, an independent t-test was conducted between the means of males and females on the satisfaction scale. The difference was not significant. For males the mean was 12.5 and the standard deviation was 2.4. For females the mean was 11.7 and the standard deviation was 3.1. These results suggest that, given the present sample, neither men nor women reported greater or less satisfaction.

Of the 5 selected variables 4 correlated with life satisfaction levels while 1 measure did not. Additionally, three other statistically significant correlations were revealed. It was hoped that the present study would reveal some information about what behaviors facilitated well-being and life satisfaction upon retirement and old age. As a result, the information discovered may be utilized to help individuals prepare for the changes that accompany aging. The findings are discussed in the following sections.

Hypothesis 1

Analysis and Conclusion:

No statistically significant correlation was found to exist between the Interest/Avocation Measure and the Life Satisfaction Index. That is, there is no evidence to suggest that a relationship between these two variables exists. However, there may have been a problem with the Interest/Avocation Inventory as it did not enable the researcher to separately adjust total scores for those persons who had avidly pursued only one or two particular interests/avocations throughout their individual lives. As a result, the test demanded diverse and numerous activity participation in order for there to be a significant correlation between interest/activity participation and life satisfaction. Persons who pursued the same activity throughout life had artificially deflated marks. The results may thus reflect weak instrumentation. The results might also reflect the fact that life-long avocations are satisfying even in retirement (Aldwin,1991; Bloom,1984; Crawford, 1979; Gordon,1984; Hunnisett,1981; Kennedy,1991; Nadelson,1990; Sulamith,1972). Blythe (1980) reported that retirees with lifetime or long-term pursuits scored higher satisfaction levels.

Although the results did not indicate a relationship between interests/avocations and life satisfaction, some of the comments made by participants are revealing. One 72 year old widow stated the importance of having plans and activities: "Retirement is most rewarding when you have tried to prepare for it. You should stay active and communicate with friends and relatives, make friends, etc. Just sitting, rocking, having no hobby and staying shut in is quite a drawback" (Milletti,1987;9). Similarly, another retired person noted "Before I retired, I thought lack of duties would be pleasant . . . I now realize that I should have planned other regular activities" (Milletti,1987;9).

It is difficult to separate activities/interests from social relations as they become entwined. In the discussion of the Provision of Social Relations, more information about activities and social interaction is provided.

The literature has indicated strongly that a relationship does exist between interests/avocations and satisfaction levels, so retesting with a different instrument may reflect this more conclusively.

The Interest/Avocation measure needs to be redesigned so that the score of the person is not affected by the number of different interests but rather is indicative of strength of interests only. A measure could be designed which asked more generic questions about activities rather than asking about participation in a number of specific activities. Perhaps, the amount of time per day or month spent pursuing activities might be used to assess strength of interests/avocations. Then, strength of interest would be the main measure rather than number.

Hypothesis 2

Analysis and Conclusion:

Having a secure financial status has a positive affect upon level of satisfaction during retirement and old age. Adequate finances permit an individual to have adequate health care, travel monies and disposable capital which impact overall life satisfaction levels. (Gordon,1984; Hunnisett,1981; Novak,1985; Sulamith,1972; Tournier,1971; Watters,1988; Wette,1991). Furthermore, one's sense of well-being is enhanced by knowing that one has security. (Tournier,1971; Watters,1988). Overall, a male's satisfaction upon retirement correlates more strongly with the financial index whereas it correlates a bit less strongly for females. Again, a quote from one of the participants emphasizes the importance of financial security. However, finances remain very important for all retirees regardless of gender: "My present and future would be less flawed with uncertainty if my financial situation were stronger" notes one 66 year old

(Milletti,1987;6). Having adequate finances affects many aspects of life after retirement and during old age.

Hypothesis 3

Analysis and Conclusion:

The provision of social relations has a negative correlation with life satisfaction. The provision of social relations scale was reverse scored so that a negative correlation indicates a positive relationship between it and life satisfaction. Inadequate provision of social relations negatively impacts life satisfaction scores whereas adequate provision of social relations positively impacts life satisfaction scores. A moderate correlation between the two variables existed for females only. Males showed a small insignificant correlation. The noncorrelation for males on this measure is a bit of a surprise. In order to examine the reasons for this, this researcher went back to participants in the study for a validity check and as well, examined the literature. One male participant when questioned about social relations stated that his children had their own lives and he did not wish to be a nuisance so he kept to himself. Another stated that he wasn't much for visiting, although he admitted since he had lost his spouse he had grown rather lonely and so he had joined a senior's club for writing and other art activities. Interestingly, when correlational analysis was calculated for males, locus of control and provision of social relations (PSR) showed a strong relationship ($r = -.861$). As PSR is reverse scored, this correlation suggests that when more relatives and friends are providing support, males score higher on the internal locus of control end of the continuum. The literature suggests that one reason for this may be due in part to the social buffer that relations and friends provide. Szinovacz and Washo (1992) examined gender differences in response to retirement and found that men experienced fewer stressful events upon retirement than women and also that unlike men, many women are forced into retirement because of life stressers. For example, women are often forced into

retirement by a spouse's or other family member's illness (Szinovacz, Ekerdt & Vinick,1992; Szinovacz & Washo,1992). Instead, men who are satisfied in retirement tend to feel more in control as they have left their work and are relaxing into the less-demanding environment of home (Riker & Myers,1992). As one retired male stated: "I just turned 68 years of age, and I'm satisfied with my life. I am a farmer and glad to be rid of the anxieties and uncertainties of farming" (Lonetto & Duncan-Robinson,1989;156).

The literature notes that men who are surrounded by friends and family sometimes note that they are forced into being involved in activities and social gatherings in which they are not truly interested (Riker & Myers,1990). Petty annoyances and problems that involve family and friends annoy men whereas women tend to be more involved in family problems and stresses as mediators and helpers throughout life and thus, are perhaps more practiced in dealing with them later in life (Marshall,1987; Riker & Myers,1990; Szinovacz, Ekerdt, & Vinick,1992).

When gender was isolated as a factor, a statistically significant correlation existed between provision of social relations and life satisfaction for females (r=-.489). When I returned to question four participants who showed a strong correlation between provision of social relations and life satisfaction levels, they said that they felt that their families and friends gave them the most meaning and happiness in their lives and always had. This held particularly true for widows. This is congruent with the literature on widows and divorcees as well (Milletti,1987; Riker & Myers, 1992; Szinovacz, Ekerdt, & Vinick,1992). Those individuals who did not report a strong relationship between provision of social relations and life satisfaction said that they had good friends who were supportive and that they enjoyed the company of their children and/or grandchildren, but did not expect much support from their mates and or children and thus, perhaps were less subject to being disappointed by the quality of their social relations in general.

Research on aging and retirement has indicated that there are several beneficial effects of social interaction. Increased social support has been linked to improved mental health and a decrease in physical illness (Chappell,1992). Several studies have indicated that social support networks provide an important buffer for crisis events like retirement and illness (Chappell,1992; Erikson et al,1986; Kennedy,1991; Kessler & McLeod,1985; Severino et al,1986). Kessler and McLeod (1985) found that reports of well-being were increased when social relations were there during crisis. Kennedy (1991) found that grandparenthood provided a meaningful social role that increased reports of satisfaction in retired persons. Chappell (1992) discussed studies which showed that levels of satisfaction were increased when social buffers were present both in times of crisis and for daily stresses. Severino et al (1986) reported that grandparents reported increased social ties and interaction with family. As well, grandparenthood was seen to provide a new role that enhanced the grandparent's feelings of usefulness.

Existing kin and friendship networks affect the number of activities many retired persons engage in. For example, unmarried, divorced, or widowed persons may be excluded from couple-oriented activities (Szinovacz, Ekerdt, & Vinick,1992). Additionally, single or never married men tend to be more socially isolated from kin than married men and so, for unattached men when work ties are lost they may have fewer opportunities for social interaction (Szinovacz, Ekerdt, & Vinick,1992). Married women scored higher on participation in activities than married men although married women report less relative visiting and formal social activity than do women who are divorced or widowed. Unmarried men report a higher level of social activity than married men and state that visiting friends is a very common activity for them. Married persons report far less social activity but perhaps that is due in part to the fact that they still have their partners with whom to socialize and interact (Szinovacz, Ekerdt, & Vinick,1992).

Hypothesis 4

Analysis and Conclusion:

Locus of control correlated with life satisfaction levels. Locus of control may be a decisive personality trait which affects well-being and satisfaction. When males and females are separated males show no clear correlation (r=.0144) whereas females show a moderate correlation (r=.506). Although a great deal of research has not been done on females retiring, a bit of research has been done which supports this finding. In past generations where women were less involved in the work force, retirement was largely a male only phenomenon. Now, both men and women are retiring, and in the sample that I examined all persons were retiring from a major career or profession. However, in many cases the women had performed their child-rearing duties and delayed their career until their children began school.

Research suggests that men and women respond differently to the aging process itself. Riker and Myers (1990) noted that during the first half of their lives both men and women focus on careers and job success. They both gain success and skill in these arenas. Then as midlife begins and extending into old age, men become more concerned about people and relationships whereas women often take jobs and become more aggressive, self-confident and independent at this time (Riker & Myers,1990). This can sometimes cause problems in a marriage as the male slows down and becomes more family-oriented as simultaneously, the female is relieved of some family duties and seeks to fulfill her career objectives (Levinson,1996; Milletti,1987; Riker & Myers,1990; Szinovacz, Ekerdt, & Vinick,1992). As a result, marital counseling may become necessary at this point. It seems then, that males and females may have different motivations and interpretations of events as they enter middle and late adulthood.

As women age they often gain more self-esteem and self-confidence; this too, may explain the increase in control that women report as they age. For example, Neild & Pearson (1992) interviewed many aging women for a documentary and study on women and found that most of the women reported a gain in self-acceptance as they aged. One 64 year old female summed this up: "You learn who you are as you grow older, you live up to your expectations, not those of others. You know it took me years to learn that, but I'm glad I know it" (Lonetto & Duncan-Robinson,1989). Many older women reported that whereas in their youths they had been insecure and uncertain about themselves and their abilities, now when they looked back across their lives they had to admit to themselves that they had been strong and persevered through many adversities (Doress & Siegal,& Woman's Cooperative,1987; Laurence, 1989; Neild & Pearson,1992).

Spar & La Rue (1992) found that locus of control style impacted one's coping with loss as well as one's health behavior. For example, older persons with a primarily external control style felt that they were controlled by outsiders such as medical experts and other outsiders. In contrast, persons with an internal locus style showed that their well-being tended to increase when they were given opportunities to take charge of their predicaments. In addition, in the counseling of persons, different approaches work better depending upon the individual's locus of control style (Spar & La Rue, 1990). Persons who feel in control tend to take more active measures toward changing their predicaments whereas those with an external orientation feel reliant upon outsiders for help and thus, may feel at the mercy of the medical system and government systems.

Hypothesis 5

Analysis and Conclusion:

Poor health decreases one's ability to be satisfied upon old age. (Cleary & Cleary,1993; Comfort,1977; Novak,1985; Sherron and Lumsden,1978). The impact that poor health has on life satisfaction does not perhaps become obvious until one's health begins to fail. Only then does an individual realize that poor health impacts all facets of life. It is apparent in the literature that often people do not appreciate the vital importance of health until it begins to fail. While finances correlated most strongly with life satisfaction in this study, it seems that once health begins to fail, people single out health out as the singlemost important variable in their lives. Numerous retirees reported on this. Many persons wistfully noted that money cannot buy health. One 71 year old man whose health had begun to fail summed up the importance of good health with the following statement:

> If I could plan my retirement again, I'd plan to retire at 62, with less income and greater physical stamina. In my case, it would have been helpful to have been jolted into an awareness that life is not really infinite, before a health problem forces that recognition. I just couldn't open my eyes and see the truth (Milletti,1987;109).

The literature review predicts that ill health would diminish satisfaction and the study supports this point time and time again (Comfort,1977; McKenzie,1980; Novak,1985; Riker & Myers,1990; Sherron & Lumsden,1978; Szinovacz, Ekerdt, & Vinick,1992). Riker & Myers (1990) go on to suggest as well that one of the greatest reasons for lack of health in old age may be neglect of oneself. Other researchers such as Johnson and Troll (1992) confirm that family members often ensure that older relations get proper medical care; otherwise, individuals do not tend to seek or receive appropriate medical treatment.

Perhaps a measure that specifically measured health status instead of behaviors may yield more conclusive results in this regard. Alternatively, it remains possible that people do not truly appreciate the importance of their health until they begin to lose it.

Hypothesis 6

There may be interrelationships between the variables. To test hypothesis 6, the Pearson Product Moment Correlation was calculated for each possible interrelationship between the variables. Three statistically significant interrelationships were identified between variables. They are:

A) There is a statistically significant relationship between Provision of Social Relations and Illness Behavior.

Analysis and Conclusion:

Having adequate social relations does decrease the strength and number of a person's illness behaviors. The key reason behind this relationship is perhaps due to the fact that persons with friends and family are more likely to get secondary input about their aches and pains (Crawford,1979; Doress, Seigal & Laskin,1987; Heynen & Boyer,1990). Whereas a lone individual may incorrectly attribute health problems to the natural process of aging, supportive family and friends will likely insist that proper professional assessment be explored. Further, it may be that some illness behaviors are attention-getting behaviors which, in addition to providing attention, provide the aging individual with help, company and significance (Johnson & Troll,1992; Knopf,1975; Sherron & Lumsden,1978; Sulamith,1972). Finally, older and particularly poorer persons may not get help because they cannot afford it and or they may become depressed and immobilized from illness (de Beauvoir,1977; Hayflick,1994; Leiberman

& Tobin,1983). Only those persons with proper social relations may receive the time and attention they truly need.

When data are examined separately for males and females, differences are apparent. For males the correlation coefficient between life satisfaction and illness behaviors is -.467 whereas for females the correlation coefficient is -.213. The gender difference is not huge, but again may be reflective of the fact that women are more often asked to act as caregivers and thus, women may be more dramatically affected by illness whether it is their own or someone else's (Riker & Myers,1990).

B) There is a statistically significant relationship between Locus of Control and Finances. The correlation coefficient of .378 meets criterion significance. When data are examined separately for males and females, differences are apparent. For males the correlation coefficient between locus of control and finances is -.401 whereas for females the correlation coefficient is .620. The cohort group that was studied was one in which men were largely the main breadwinners. Most females had joined the workforce following childrearing duties. It is possible that the men felt they were losing internal control over finances as they retired just as women felt they were gaining some control (Riker & Myers, 1990).

Analysis and Conclusion:

Overall the gender differences regarding the relationship between locus of control and finances is rather strong. The results for males indicate that there is a tendency to report a more external locus of control when finances are fine whereas females generally report the opposite effect. As there are not much data on females and retirement the reason for the correlation between internal locus of control and finances is not entirely clear.

C) For males alone there was a strong negative correlation between Locus of Control and Provision of Social Relations.

Analysis and Conclusion:

For men there appears to be a general gain in a feeling of control when more relations and friends are available. Research has indicated that men are less socially involved with family and friends throughout life than women are. Part of this may be attributable to choice. Men surrounded by friends and family sometimes note that they are forced into being involved in activities and forced to attend social gatherings when they simply wish to be alone or pursue independent tasks (Chappell,1992; Riker & Myers,1990; Szinovacz, Ekerdt, & Vinick,1992). Thus, the greater the number of relations and friends the more likely that social obligations will exist in which the male is asked to participate.

Gender Differences

There exist overall differences between male and female responses to retirement. Most retirement studies have been conducted on males, so it is only recently becoming apparent that females react differently to retirement than males. Overall women have been found to be more vulnerable to stress and retirement is viewed as a stressful event. Szinovacz & Washo (1992) studied men and women to examine retirement adaptation and life events. Their study revealed 2 main differences between males and females in the aforementioned regard: first, females were found to experience more life events than men. Second, women react more strongly to life stressers than males. These explanations for the differential between men and women partially explain the reason why women's satisfaction levels correlate more strongly with social relations and locus of control. Women's lives tend to be impacted more by life events because they are more likely to be called upon to provide support. Also, as women tend to be more emotionally involved with kin, they may experience a greater

vulnerability when a stressful life event occurs (Szinovacz & Washo,1992). Further, as women tend to outlive men, women are more likely to need to have social relations with kin and friends. As many married males predecease their spouses, they may not be so dependent upon having well-developed alternate social networks.

Predicting Satisfaction

The multiple regression analyses results were congruent with the simple regression results. Because financial status, provision of social relations, locus of control style, and illness behaviors do correlate with life satisfaction, it was important to see whether these 4 variables could account for variation in satisfaction. In order to assess this possibility, a multiple regression equation was written that attempted to predict the strength of satisfaction from the combined effects of the variables.

Total strength of satisfaction is predicted at a moderate level by the combined effects of all variables (R2 = 65%). Thus, approximately 65% of the variation in strength of success is accounted for by these 4 predictors. When financial status, provision of social relations and locus of control style which showed the strongest correlations with life satisfaction were subjected to a stepwise regression analysis to account for variable interactive effects, only financial status remains correlated with life satisfaction for males (R2 = 60); thus, approximately 60% of the variation in strength of life satisfaction is accounted for by financial status for males. For females, a stepwise regression reveals that both financial status and provision of social relations together are important as together these variables account for 56% of the variance in life satisfaction strength (R2=.56). Finances are positively correlated to life satisfaction for both males and females whereas provision of social relation is correlated only to life satisfaction for females and this is a negative correlation.

Delimitations of Study

The study focused on middle class participants. Persons were required to read to complete this study; thus, illiterate persons were not included. Only those persons who were either partially or fully retired were examined. Persons had to be a minimum of 55 years of age before they were selected as participants. Due to constraints of time and resources, the number of participants examined was set at 26.

Limitations of Study

One limitation of the study was that the Interests/Avocation Inventory failed to discriminate between strength and number of interests/avocations. This scale could be redesigned to measure strength and number separately. One way that this measure may be made more effective would be if it were designed to measure more generic interests/avocations instead of the specific one's outlined in the original inventory. A second limitation is that the research collected is self-report data. Although complete anonymity was given, some of the participants may have exaggerated or diminished their scores either purposefully or inadvertently. Finally, the test data was collected on white middle class persons so the findings are not truly generalizable to the lower and upper classes or to other ethnic groups.

Integrated Discussion

It is possible to make some educated plans to improve the chance of having a successful retirement and old age. Most clearly, financial planning is essential to a satisfying old age. Financial planning needs to be addressed early in life and intelligently so that the means are there in old age for unforeseen illnesses and expenses. This necessitates some foresight and open-mindedness. Also, one's health must be safeguarded throughout the lifespan so that a person reaches retirement and old age with a relatively healthy body. Adequate provisioning of social relations impacted illness behaviors in a positive manner while simultaneously increasing overall reported life satisfaction levels. Proximity to friends and family was most significant for females. It does seem that the presence of social help did lead aged persons, male and female, to seek more appropriate medical care even if it did not simultaneously increase overall satisfaction levels for men. In the literature review and certainly in practice, it seems that having family and friends nearby is helpful and necessary. In sum, it seems clear that certain variables impact satisfaction while others apparently do not. Thus, an individual may take steps to ensure that he/she is preparing in the necessary aspects of life to maximize his/her potential for a successful retirement and old age. As one 66 year old woman said: "Knowledge is a plus. Explore any avenues which appeal to you . . . then you are in a position to make informed choices when the time comes [to retire]" (Milletti,1987;7). Milletti (1987) surveyed over 1500 retired persons and found that many regretted a lack of planning for retirement. One 71 year old man summed up this group sentiment best with the following hindsight.

> I would have done more planning. This would include retirement counseling; . . . we need to learn how to take risks in learning, new careers, new travel skills, new ways to volunteer, and new ways to exercise for health's sake. It would help to plan more long range health care -- and even [for] losing a spouse" (Milletti,1987;5).

Implications For Practice

As our society is aging, it is crucial that preventative and preparatory steps are taken to maximize the potential for a successful and rewarding retirement and old age. Counseling pre-retirees about appropriate planning is essential to prepare persons psychologically and philosophically for retirement and aging. In specific, the key areas of finances, social relations, and health and illness behaviors and attitudes should be discussed. Various coping strategies and options should be brought into the awareness of retiring persons. Knowledge is power; ignorance is crippling.

In specific, based on the present study and the literature review several areas need to be looked at; these are:

- •health and illness behavior
- •social networks (family and friends)
- •interests/avocations
- •locus of control styles
- •male/female differences

As a geriatric counselor it is important to be aware of individual developmental change and psychological need. Each individual needs to feel significant and be fulfilled through the pursuit of meaningful activity. Social outlets need to be provided so that lonely, widowed, childless and isolated individuals may get appropriate exposure, advice and contact. A counselor must be aware that increasingly problems and issues surrounding social isolation, personal worth, and meaningful community input will become more and more important to the older individual. Counselors will need to direct and help retired persons to find areas where they can fulfill these needs such as through volunteerism. In sum, with a protracted retirement, individuals will need to plan and pursue activities which meet their individual needs and

talents. A good counselor will help direct the retired person toward meaningful pursuits.

Implications For Research

The area of retirement and aging has been largely ignored in scholarly research. With an aging population it is imperative that the knowledge of our elders is gathered and reported. The knowledge accumulated may then be used to create informative materials that can be provided to persons so that aging is seen as a normal and natural part of the lifecycle. There are numerous areas about aging and retirement which might be examined. I propose the following as research projects:

1. Elder persons could be interviewed at great length to record individual perceptions and ideas about the aging process and in particular, old age itself.

2. Retiring individuals could be assessed on a variety of measures such as life satisfaction, health behaviors, and control style both by themselves and by their spouses (and or significant others) in order to compare the accuracy of individual perceptions versus the perceptions others hold.

3. A similar study to the present study could be conducted on individuals of lower and or higher social status to see if the results are similar to those of the present study which primarily involved the middle classes.

4. Examine male and female differences and control style in more depth to understand gender differences in this regard.

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APPENDIX A
INDICATORS OF SUCCESSFUL RETIREMENT AND AGING STUDY -Sabrina Fox

INSTRUCTIONS:
•Please read the following terms and conditions to decide if you wish to volunteer to complete the questionnaires for this study.
•Please note that you may choose not to participate and or may withdraw from participation if, in any way, you feel unhappy or simply choose not to continue with the study.

A) Purpose
The purpose of this research is to determine if certain factors such as physical health and avocational interests affect one's level of satisfaction and well-being upon retirement. This specific research project is being conducted as partial requirements for a Masters Degree in Educational Psychology for Sabrina Fox.

B) Benefit
The potential benefit to being involved in the study includes the fact that the data may be used to help individuals adapt more successfully to retirement and old age.

C) Risks Involved
Other than feeling tired I do not think that there are any risks involved in undergoing this study as the nature of the data is not highly personal. Overall I estimate it will take about 75 minutes or one hour and one half to complete all of the questionnaire data.

D) Tasks Involved.
Each participant will be asked to complete 6 brief questionnaires on the following topics: Life Satisfaction, Financial Situation, Family and Social Support Networks, Physical Health, Personal Control Style and Interests/Avocations. These are done on simple rating scales and are relatively simple and straightforward

E) Confidentiality
I, Sabrina Fox, the researcher for this study will do everything that I can to keep names and identifying features confidential. The only place that names will be linked to data is on the original data. The reason I want this information is simply to link gender and age to the factors that are being studied and to ensure that I am not duplicating any participants. Beyond the initial questionnaire delivery I will codify the data and then no names or identifying features will be linked to particular answers.

CONSENT: Print Name:_____

AGE:_____ GENDER _____

Date:_____

I, (signature here) _____,
have read the above information and consent to the terms set forth for this study on the Indicators of Successful Retirement and Aging.

APPENDIX B
SCORING INFORMATION ABOUT THE MEASUREMENT SCALES USED

1. Interests/Avocations Index (IAI)
Each item employs a rating scale from 1 to 7, with seven being the highest score. Higher scores indicate a greater number and diversity of personal interests/avocations. The range of possible scores is from 1 to 126.

2. Financial Situation Index (FSI)
There are 18 items of which 9 are answered correctly if positively and 9 are answered correctly if answered negatively. Scores may range from 0 to 18 with higher scores being reflective of a better financial index.

3. Provision of Social Relations (PSR)
The PSR is scored by reverse-scoring items 7 and 15 and then summing the item scores on the other items. Each item has a value range between 1 and 5. The minimum possible score is 15. Lower scores are reflective of a more positive situation.

4. Internal Locus of Control Index (ICI)
Each item is scored on a five point scale. Higher scores reflect a higher internal locus of control style. Half of the items are worded so that highly internally oriented persons would answer at the usually end of the scale whereas the other half are worded at the rarely end. The rarely response is scored as 5 points on items 1, 2, 4, 6, 8, 11, 14, 17, 19, 22, 23, 24, 26, and 27; for the remainder of the items the response usually is scored as 5 points. This produces a possible range of scores from 28 to 140 with higher scores reflecting higher internal locus of control.

5. Illness Behavior Index (IBI)
It is scored on a six-point Likert scale. High scores indicate greater illness behavior. The range of scores is 1 to 120. Higher scores reflect more illness behavior.

6. Life Satisfaction Index Z (LSIZ)
The LSIZ is scored by assigning one point to each correctly answered question. A correct score is "agree" on items 1, 2, 4, 6, 8, 9, 11, 12, 13, 14, and 17. Other items are correct if the answer is "disagree". The range of scores is 1 to 18. Higher scores reflect greater satisfaction.

APPENDIX C

INTEREST/AVOCATION MEASUREMENT SCALE

*Instructions: Select **THE ONE** response between seven and one which EXCLUSIVELY describes your pursuit of the activities or interests mentioned below.*

7. Pursued throughout entire life to greater or lesser degrees
6. Pursued throughout adult life to greater or lesser degrees
5. Began Pursuing more than 2 years before retirement.
4. Began Pursuing activity 1 year or less prior to retirement.
3. Began Pursuing only once retired.
2. Do not pursue in retirement.
1. Do not know the answer.

1. _____ Actively playing sports (not watching).
2. _____ games (board games/chess/cards/bingo and the like)
3. _____ boating
4. _____ fishing and hunting
5. _____ travel
6. _____ camping and hiking
7. _____ the arts - performing arts, graphic arts,
8. _____ gardening
9. _____ cooking/baking for pleasure
10. _____ crafts (woodwork/needlecraft and the like)
11. _____ nature study
12. _____ collecting (of anything, i.e. stamps, cameras, coins).
13. _____ studying - new areas of education- formally or informally (i.e. painting, computer usage, literature, swimming and so forth)
14. _____ volunteering
15. _____ other business pursuits other than main life career
16. _____ part-time business venture
17. _____ consultant work
18. _____ other

Please list other activities/pursuits/or interests not on the list:

_____

_____

_____

APPENDIX D
FINANCIAL MEASUREMENT SCALE

Source: The Measurement of Satisfaction in Work and Retirement: A Strategy for the Study of Attitudes.
Patricia Cain Smith & Lorne M. Kendall (1969), Chicago, Illinois: Rand McNally & Co.
pp84.
(Items in Final Version of RDI (RDI=Retirement Descriptive Index).

Financial Situation Index

Instructions: Put (**Y**) for Yes beside an item if the item describes a particular aspect of your retirement situation, (**N**) for No if the item does not describe an aspect, put (**?**) or I Don't Know, if one cannot decide.

1. _____ Barely live on income.
2. _____ Insecure
3. _____ Satisfactory
4. _____ Well off
5. _____ Steady
6. _____ Bad
7. _____ Need outside help
8. _____ Worry about it.
9. _____ High income
10. _____ Good Pension Plan
11. _____ Have to make do
12. _____ Serious financial problems
13. _____ No money to meet emergencies
14. _____ Income from investments
15. _____ Need help from children
16. _____ Income provides luxuries
17. _____ Self-supporting
18. _____ Good life insurance plan

APPENDIX E
PROVISION OF SOCIAL RELATIONS (PSR) INVENTORY

Instructions: We would like to know something about your relationships with other people. Please read each statement below and decide how well the statement describes you. For each statement, show your answer by indicating to the left of the item the number that best describes how you feel. The numbers represent the following answers:

1 = very much like me
2 = much like me
3 = somewhat like me
4 = not very much like me
5 = not at all like me

_____ 1 When I'm with my friends, I feel completely able to relax and be myself.

_____ 2 I share the same approach to life that many of my friends do.

_____ 3 People who know me trust me and respect me.

_____ 4 No matter what happens, I know that my family will always be there for me should I need them.

_____ 5 When I want to go out to do things I know that many of my friends would enjoy doing these things for me.

_____ 6 I have at least one friend I could tell anything to.

_____ 7 Sometimes I'm not sure if I can completely rely on my family.

_____ 8 People who know me think I am good at what I do.

_____ 9 I feel very close to some of my friends.

_____ 10 People in my family have confidence in me.

_____ 11 My family lets me know they think I am a worthwhile person.

_____ 12 People in my family provide me with help in finding solutions to my problems.

_____ 13 My friends would take the time to talk over my problems, should I ever want to.

_____ 14 I know my family will always stand by me.

_____ 15 Even when I am with my friends I feel alone.

APPENDIX F
INTERNAL CONTROL INDEX (ICI) INVENTORY

Instructions: Please read each statement. Where there is a blank, decide what your normal or usual attitude, feeling, or behavior would be:

A = Rarely (less than 10% of the time)
B = Occasionally (about 30% of the time)
C = Sometimes (about half the time)
D = Frequently (about 70% of the time)
E = Usually (more than 90% of the time)

Of course there are always unusual situations in which this would not be the case, but think of what you would do or feel in most normal situations.
Write the letter that describes your usual attitude or behavior in the blank to the ***left:***

_____ 1 When faced with a problem I _____ try to forget it.

_____ 2 I _____ need frequent encouragement from others for me to keep working at a difficult task.

_____ 3 I _____ like jobs where I can make decisions and be responsible for my own work.

_____ 4 I _____ change my opinion when someone I admire disagrees with me.

_____ 5 If I want something I _____ work hard to get it.

_____ 6 I _____ prefer to learn the facts about something from someone else rather than having to dig them out of myself.

_____ 7 I will _____ accept jobs that require me to supervise others.

_____ 8 I _____ have a hard time saying "no" when someone tries to sell me something I don't want.

_____ 9 I _____ like to have a say in any decisions made by any group I'm in.

_____ 10 I _____ consider the different sides of an issue before making any decisions.

_____ 11 What other people think _____ has a great influence on my behavior.

A = Rarely (less than 10% of the time)
B = Occasionally (about 30% of the time)
C = Sometimes (about half the time)
D = Frequently (about 70% of the time)
E = Usually (more than 90% of the time)

_____ 12 Whenever something good happens to me I _____ feel it is because I've earned it.

_____ 13 I _____ enjoy being in a position of leadership.

_____ 14 I _____ need someone else to praise my work before I am satisfied with what I have done.

_____ 15 I am _____ sure enough of my opinions to try and influence others.

_____ 16 When something is going to affect me I _____ learn as much about it as I can.

_____ 17 I _____ decide to do things on the spur of the moment.

_____ 18 For me, knowing I've done something well is _____ more important than being praised by someone else.

_____ 19 I _____ let other peoples' demands keep me from doing the things I want to do.

_____ 20 I _____ stick to my opinions when someone disagrees with me.

_____ 21 I _____ do what I feel like doing not what other people think I ought to do.

_____ 22 I _____ get discouraged when doing something that takes a long time to achieve the results.

_____ 23 When part of a group I _____ prefer to let other people make all the decisions.

_____ 24 When I have a problem I _____ follow the advice of friends or relatives.

_____ 25 I _____ enjoy trying to do difficult tasks more than I enjoy trying to do easy tasks.

_____ 26 I _____ prefer situations where I can depend on someone else's ability rather than just my own.

_____ 27 Having someone important tell me I did a good job is _____ more important to me than feeling I've done a good job.

_____ 28 When I'm involved in something I _____ try to find out all I can about what is going on even when someone else is in charge.

APPENDIX G ILLNESS BEHAVIOR INVENTORY --IBI INVENTORY

Instructions: Please put a number beside each item indicating the extent to which you agree or disagree as follows:

1 = strongly disagree
2 = disagree
3 = somewhat disagree
4 = somewhat agree
5 = agree
6 = agree strongly

_____ 1. I see doctors often.

_____ 2. When ill, I have to stop work completely.

_____ 3. I stay in bed when I feel ill.

_____ 4. I work fewer hours when I'm ill.

_____ 5. I do fewer chores around the house when I'm ill.

_____ 6. I seek help from others when I am ill.

_____ 7. When ill, I work slower.

_____ 8. I leave work early when I'm ill.

_____ 9. I complain about being ill when I feel ill.

_____ 10. I avoid certain aspects of my job when I'm ill.

_____ 11. I take rest periods when I am ill.

_____ 12. Most people who know me are well aware that I take medication.

_____ 13. Even if I don't feel ill at certain times, I find that I talk about my illness anyway.

_____ 14. Others often behave towards me as if I am ill.

_____ 15. Although I very seldom bring up the topic of my illness, I frequently find myself involved in conversation about my illness with others.

_____ 16. Others seem to act as if I am more ill than I really am.

_____ 17. My illness or aspects of it are a frequent topic of conversation.

_____ 18. When I'm ill people can tell by the way I act.

_____ 19. Often I act more ill than I really am.

_____ 20. I have large medical bills.

APPENDIX H

LIFE SATISFACTION INDEX Z (LSIZ)

Instructions: Here are some statements about life in general that people feel different ways about. Read each statement on the list and indicate at left the number (1 or 2 or 3) that best describes how you feel.

1 = Agree
2 = Disagree

_____ 1. As I grow older, things seem better than I thought they would be.

_____ 2. I have gotten more of the breaks in life than most of the people I know.

_____ 3. This is the dreariest time of my life.

_____ 4. I am just as happy as when I was younger.

_____ 5. My life could be happier than it is now.

_____ 6. These are the best years of my life.

_____ 7. Most of the things I do are boring or monotonous.

_____ 8. I expect some interesting and pleasant things to happen to me in the future.

_____ 9. The things I do are as interesting to me as they ever were.

_____ 10. I feel old and somewhat tired.

_____ 11. As I look back on my life, I am fairly well satisfied.

_____ 12. I would not change my past life even if I could.

_____ 13. Compared to other people my age, I make a good appearance.

_____ 14. I have made plans for things I'll be doing in a month or a year from now.

_____ 15. When I think back over my life, I didn't get most of the important things that I wanted.

_____ 16. Compared to other people, I get down in the dumps too often.

_____ 17. I've gotten pretty much what I expected out of life.

_____ 18. In spite of what some people say, the lot of the average man is getting worse, not better.